

REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

A minor typographical error has been corrected in Table 5.

Claims 1-8 have been cancelled without prejudice and replaced with new claims 9-18 to more particularly point out and distinctly claim the subject matter of this invention.

New claim 9 corresponds to a combination of claims 1 and 2 and is believed to more particularly define the claimed support member so as to overcome the rejection of claims 1-8 under 35 USC 112, second paragraph.

New claims 10-11 correspond to original claims 3-4, respectively. The wording of new claim 11 is deemed to overcome the ground of rejection of claim 4 under 35 USC 112, second paragraph. New claims 12, 13 and 15 correspond to original claim 5. New claims 14 and 16 correspond to original claim 6. New claims 17-18 correspond to original claims 7-8, respectively.

Claims 1, 7 and 8 were rejected under 35 USC 102 as being anticipated by JP10-174849. Claim 2 was not rejected.

This ground of rejection is deemed to be overcome by incorporation of the limitations of claim 2 into claim 1 which is presented as new claim 9.

Lastly, claims 1-8 were rejected under 35 USC 103 as being unpatentable over JP 10-174849. This ground of rejection is deemed to be overcome as applied to the new claims for the following reasons.

The cited reference JP '849 only discloses that polyester fiber having a fiber length of 3-15 mm and a fineness of 1-3 denier is used as a fiber for a nonwoven fabric. See [0007] column in the English text of the cited reference. The cited reference neither discloses nor suggests a support member containing a polyester fiber having a double refraction (Δn) of 0.170 or more, a heat shrinkage stress at 200°C of 0.10-0.60 g/d, and a mean single fiber fineness of 1.0-8.0 denier according to the claimed invention. In addition, the cited reference neither discloses nor suggests anywhere that the use of the above polyester of the present invention can give a nonwoven fabric in which the pore size (maximum pore diameter) is small, the air permeability is increased because

of an existence of a number of fine pores in the nonwoven fabric, and surface smoothness of the fabric is high. See page 10, line 10 to page 13, line 15; page 16, lines 4-21; the extensive detailed Examples on pages 28-49; and Tables 1-5.

The nonwoven fabric of the present invention has a mean value of breaking length at an elongation of 5%, 4.0 km or more. The present invention is based on the finding that the stress at elongation of few percent (i.e. 5%) is more important factor than the stress at elongation at breakage for the dimensional stability of the support member for the semipermeable membrane. See line 15 to line 19 on page 8 of the specification.

The cited reference fails to disclose or suggest a support member having the claimed requirements and the advantages resulting therefrom.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page is captioned "**Version with markings to show change made.**"

In view of the foregoing, favorable reconsideration and allowance is solicited.

Respectfully submitted,

Takanori SHINOKI et al.

By: Warren M. Cheek, Jr.
Warren M. Cheek, Jr.
Registration No. 33,367
Attorney for Applicants

WMC/dlk
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
May 28, 2002

the surface which was secondly subjected to the heat calender processing treatment (the surface which was secondly contacted with the metallic roll).

5 Table 5

	Basis weight (g/m ²)	Air permeability (cc/cm ² ·s)	Mean breaking length (at elongation of 5%) (km)	Surface smoothness		Pore size (μm)
				the right side (second)	the back side (second)	
Ex. 6	104	2.3	5.6	22	18	42
Ex. 7	103	2.5	6.5	18	24	39
Com. Ex. 6	102	2.6	3.7	9.6	8.6	66
Com. Ex. 7	104	2.1	3.5	9.5	10.2	65

Heretofore, there is a reverse correlation between the air permeability and the surface smoothness of the nonwoven fabric. When the density of the nonwoven fabric is decreased in order to increase the air permeability, its surface smoothness is decreased. On the other hand, when the processing conditions at the time of heat calender processing are severe or the fibers having small fineness are employed in order to increase the surface smoothness, the air permeability is decreased. These facts are general drawbacks. However, as can be seen from the results shown in the above table 5, the nonwoven fabric having high air permeability as well as high surface smoothness can be supplied according to the present invention.

In addition, as can be seen from the results shown in the above table 5, the pore size (maximum pore diameter) is